Thinking of you
Electrolux

user manual

Dishwasher

ESF2450

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Contents

Subject to change without notice

Safety information

For your safety and correct operation of the appliance, read this manual carefully before installation and use. Always keep these instructions with the appliance even if you move or sell it. Users must fully know the operation and safety features of the appliance.

Correct use

- The appliance is designed exclusively for domestic use.
- Only use the appliance to clean household utensils that are applicable for dishwashers.
- Do not put solvents in the appliance. Risk of explosion.
- Put the knives and all items with sharp points in the cutlery basket with their points down. If not, put in a horizontal position in the main basket.
- Use only branded products for dishwashers (detergent, salt, rinse aid).
- If you open the door while the appliance is in operation, hot steam can escape. Risk of skin burns.
- Do not remove dishes from the dishwasher before the end of the washing programme.
- When the washing programme is completed, disconnect the mains plug from the mains socket and close the water tap.
- Only an authorised service engineer can repair this appliance. Use only original spare parts.
- Do not do repairs yourself to prevent injury and damage to the appliance. Always contact your local Service Force Centre.

General safety

- Persons (including children) with reduced physical sensory, mental capabilities or lack of experience and knowledge must not use the appliance. They must have supervision or instruction for the operation of the appliance by a person responsible for their safety.
- Obey the safety instructions from the manufacturer of the dishwasher detergent to prevent burns to eyes, mouth and throat.
- Do not drink the water from the dishwasher. Detergent residues can stay in your appliance.
- Always close the door when you do not use the appliance to prevent injury and not to stumble over the open door.
- Do not sit or stand on the open door.

Child safety

- Only adults can use this appliance. Children must get supervision to make sure that they do not play with the appliance.
- Keep all the packaging away from children. There is a risk of suffocation.
- Keep all detergents in a safe area. Do not let children touch the detergents.
- Keep children away from the appliance when the door is open.

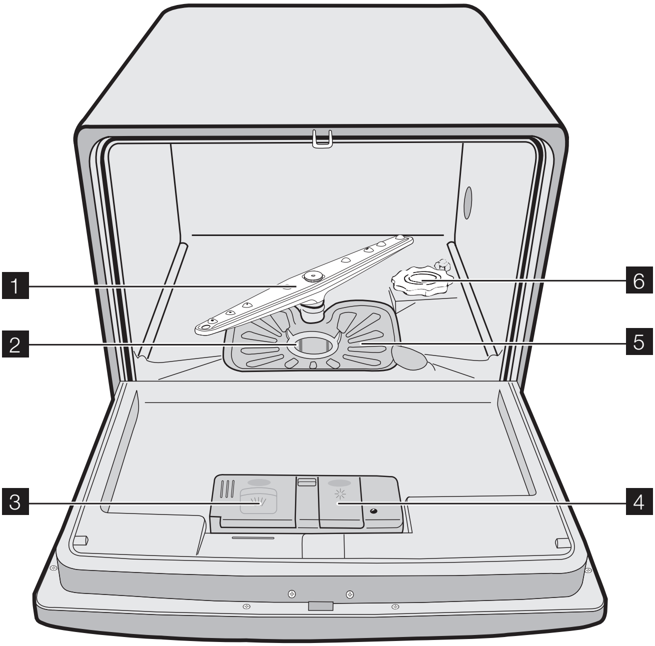
Installation

- Make sure that the appliance is not damaged because of transport. Do not connect a damaged appliance. If necessary, contact the supplier.
- Remove all packaging before first use.
- A qualified and competent person must do the electrical installation.
- A qualified and competent person must do the plumbing installation.
- Do not change the specifications or modify this product. Risk of injury and damage to the appliance.
- Do not use the appliance:
  - if the mains cable or water hoses are damaged,
  - if the control panel, worktop or plinth area are damaged, that you can get access to the inner side of the appliance.

  Contact your local Service Force Centre.
- Do not drill into the sides of the appliance to prevent damage to hydraulic and electrical components.

⚠ **Warning!** Carefully obey the instructions for electrical and water connections.

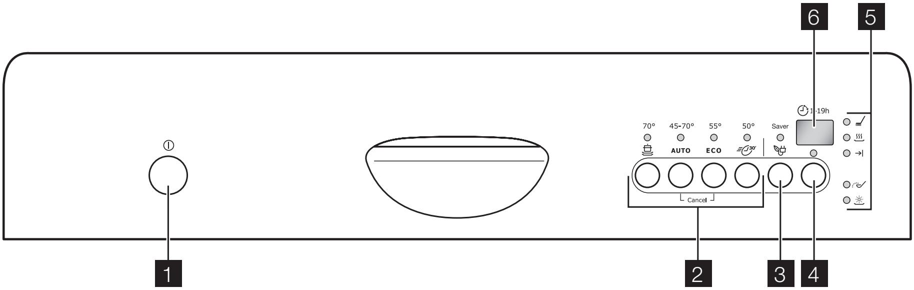
Product description

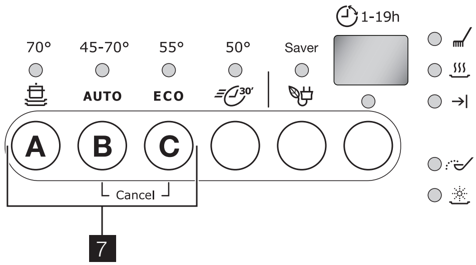


1 Spray arm
2 Microfilter
3 Detergent dispenser
4 Rinse aid dispenser
5 Flat filter
6 Salt container

The rating label is on the back of appliance.

Control panel





1 On/off button
2 Programme selection buttons
3 Save energy button /(Saver)
4 Delay start button
5 Indicator lights
6 Digital display
7 Function buttons

Indicator lights	
	The indicator light comes on when the washing phase or the rinsing phase operates.
	The indicator light comes on when the drying phase operates.
	The indicator light comes on when the washing programme is completed.
1)	The indicator light comes on when it is necessary to fill the salt container. Refer to the chapter 'Use of dishwasher salt'. The salt indicator light can stay on for some hours, but it does not have an unwanted effect on the operation of the appliance.

Indicator lights	
1)	The indicator light comes on when it is necessary to fill the rinse aid. Refer to the chapter 'Use of rinse aid'.

1) The indicator light is off when a washing programme operates.

Delay start button

Use the delay start button to delay the start of the washing programme with an interval between 1 and 19 hours. Refer to the chapter 'Setting and starting a washing programme'.

Digital display

The display shows:

- Adjusted level of the water softener.
- Programme duration.
- Remaining time to the end of the programme.
- End of a washing programme.
- Number of hours in delay start.
- Fault codes.

Save energy button

This function decreases the temperature in the drying phase. Saved energy is between 10% and 25%.

If dishes at the end of the programme are wet, keep the door ajar to let the dishes dry naturally.

This function is available with all washing programmes. The related indicator light comes on when you press the button.

The save energy function has no effect on some programmes. Refer to the chapter 'Washing programmes' for the list of programmes where save energy has or not an effect.

Function buttons

Use the function buttons for these operations:

- To set the water softener. Refer to the chapter 'Setting the water softener'.
- To cancel the washing programme in progress or a delay start in progress. Refer to the chapter 'Setting and starting a washing programme'.

Setting mode

The appliance is in setting mode when all programme indicator lights are on.
The appliance must be in setting mode for these operations:

– To set a washing programme.
– To set the water softener level.

If a programme indicator light is on, cancel the programme to go back to the setting mode. Refer to the chapter "Setting and starting a washing programme".

Use of the appliance

Refer to the following instructions for each step of procedure:

1. Make a check if the water softener level is correct for the water hardness in your area. If necessary set the water softener.
2. Fill the salt container with dishwasher salt.
3. Fill the rinse aid dispenser with rinse aid.
4. Load cutlery and dishes into the dishwasher.
5. Set the correct washing programme for the type of load and soil.
6. Fill the detergent dispenser with the correct quantity of detergent.
7. Start the washing programme.

If you use detergent tablets, refer to the chapter 'Use of detergent'.

Setting the water softener

The water softener removes minerals and salts from the water supply. Minerals and salts can have bad effect on the operation of the appliance.

Water hardness is measured in equivalent scales:

- German degrees (dH°).
- French degrees (°TH).

- mmol/l (millimol per litre - international unit for the hardness of water).
- Clarke.

Adjust the water softener to the water hardness in your area. If necessary, contact your local water authority.

Water hardness				Water hardness setting	Digital display level
°dH	mmol/l	°TH	Clarke		
>24	>4.2	>40	> 28	5	5L
18- 24	3.2- 4.2	32- 40	22- 28	4	4L
12- 18	2.1- 3.2	19- 32	13- 22	3	3L
4- 12	0.7- 2.1	7- 19	5 -13	2	2L
< 4	< 0.7	< 7	< 5	1 1)	1L

1) No use of salt required.

Electronic adjustment

The water softener is set at the factory at level 3.

1. Switch on the appliance.
2. Make sure that the appliance is in setting mode.
3. Press and hold function buttons B and C until the indicator lights of function buttons A, B and C start to flash.
4. Release function buttons B and C.
5. Press function button A.
   – The indicator lights for function buttons B and C go off.
   – The indicator light for function button A continues to flash.
   – The digital display shows the current level.

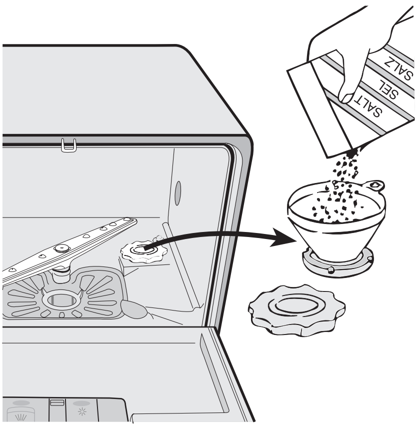
   Example: digital display shows 3L = level 3.
6. Press the function button A one time to increase the water softener level by one step.
7. Press the on/off button to save the operation.

Use of dishwasher salt

Caution! Only use dishwashers salt. Types of salt that are not applicable for dishwashers cause damage to the water softener.

Caution! Grains of salt and salty water on the bottom of the appliance can cause corrosion. Fill the appliance with salt before you start a washing programme to prevent corrosion.

Do these steps to fill the salt container:
1. Turn the cap anticlockwise to open the salt container.
2. Fill the salt container with 1 litre of water (only the first operation).
3. Use the funnel to fill the salt container with salt.



4. Remove the salt around the opening of the salt container.
5. Turn the cap clockwise to close the salt container.

It is normal that water overflows from the salt container when you fill it with salt

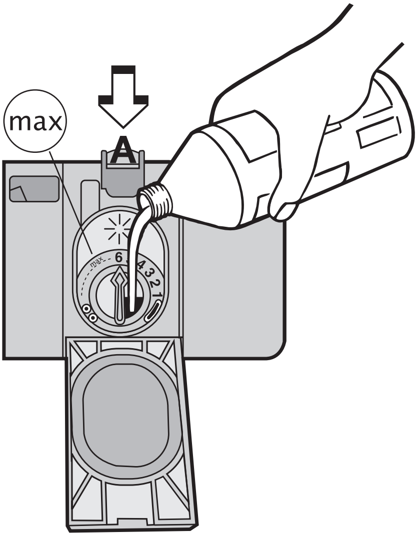
When you set the water softener to level 1, the salt indicator light does not stay on.

Use of rinse aid

Caution! Only use branded rinse aid for dishwashers.
Do not fill the rinse aid dispenser with other products (e.g. dishwasher cleaning agent, liquid detergent). There is a risk of damage to the appliance.

Rinse aid makes it possible to dry the dishes without streaks and stains.
Rinse aid is automatically added during the last rinsing phase.

Do these steps to fill the rinse aid dispenser:



1. Press the release button (A) to open the rinse aid dispenser.
2. Fill the rinse aid dispenser with rinse aid. The mark 'max.' shows the maximum level .
3. Remove the spilled rinse aid with an absorbent cloth to prevent too much foam during the subsequent washing programme.
4. Close the rinse aid dispenser.

The capacity of the rinse aid dispenser is approximately 150 ml. The quantity of rinse aid is sufficient for approximately 60 washing programmes.

Adjust the dosage of rinse aid
The appliance is set at the factory at level 1. You can set the rinse aid dosage between 1 - 6 (1- 6 ml of the rinse aid).
Refer to the washing results (chapter 'What to do if...'). Start with the lowest dosage.
1. Turn the arrow clockwise to increase the dosage.
2. Increase the dosage if there are water droplets or limescale on the dishes.

Loading cutlery and dishes

Helpful hints and tips

Caution! Only use the appliance for household utensils that are applicable for dishwashers.

Do not use the appliance to clean objects that can absorb water (sponges, household cloths, etc.).

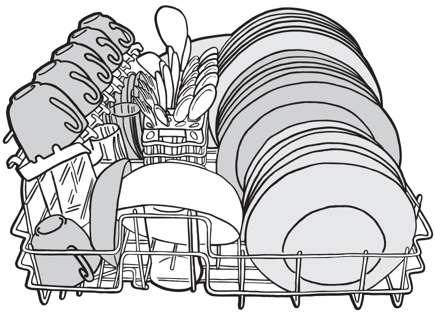
- Before you load cutlery and dishes, do these steps:
  – Remove all food remainings and debris.
  – Make burnt, remaining food in pans soft.

- While you load cutlery and dishes, do these steps:
  – Load hollow items (e.g. cups, glasses and pans) with the opening down.
  – Make sure that water does not collect in the container or in a deep base.
  – Make sure that cutlery and dishes do not lie inside one another.
  – Make sure that cutlery and dishes do not cover other cutlery and dishes.
  – Make sure that glasses do not touch other glasses.
  – Put small objects in the cutlery basket.
- Plastic items and pans with non-stick coatings can keep water droplets.
- Plastic items do not dry as well as porcelain and steel items.
- Put light items in the main basket. Make sure that the items do not move.

Caution! Make sure that the spray arm can move freely before you start a washing programme.

Primary basket

Arrange the deep dishes and large lids around the edge of the basket. Arrange items on and below the cup racks. The water must come to all parts of the dishes.
You can fold the cup racks to clean high items.



Cutlery basket

Warning! Do not put long-bladed knives in a vertical position to prevent injury.

Arrange long and/or sharp items of cutlery horizontally in the primary basket. Be careful with sharp items such as knives.
Use the cutlery basket for:
- Forks and spoons with the handles down.
- Knives with the handles up.



The cutlery basket has a cutlery grid that you can remove.
Do not let the cutlery bond together.

Make sure that the spray arm can move freely before you close the door.

Use of detergent

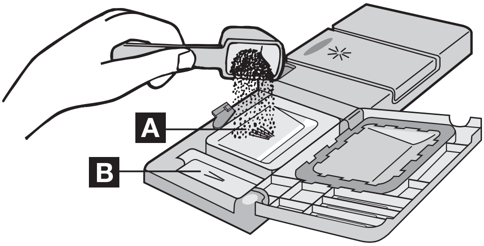
Only use detergents (powder, liquid or tablet) that are applicable for dishwashers.
Follow the data on the packaging:
- Dosage recommended by the manufacturer.
- Storage recommendations.

The instructions on the packaging usually refer to large dishwashers (12 settings).

Do not use more than the correct quantity of detergent to save an environment.

Fill with detergent

Do these steps to fill the detergent dispenser:



1. Open the lid of the detergent dispenser.
2. Fill the detergent dispenser (A) with detergent.
3. If you use a washing programme with prewash phase, put more detergent in the prewash detergent compartment (B). The detergent is removed during the prewash phase.
4. Close the lid of the detergent dispenser.

Use of detergent tablets

Put the detergent tablet in the detergent dispenser (A).
Detergent tablets contain:

- detergent
- rinse aid
- other cleaning agents.

Do these steps to use detergent tablets:

1. Make sure that the detergent tablets are applicable for your water hardness. Refer to the instructions from the manufacturer.
2. Set the lowest levels of water hardness and rinse aid dosage.

It is not necessary to fill the salt container and the rinse aid dispenser.

Do these steps when the drying results are not satisfactory:

1. Fill the rinse aid dispenser with rinse aid.
2. Set the rinse aid dosage to position 2.

Do these steps to use the detergent powder again:

1. Fill the salt container and the rinse aid dispenser.
2. Set the water softener to the highest level.
3. Do a washing programme without dishes.
4. Adjust the water softener. Refer to the chapter 'Setting the water softener'.
5. Adjust the rinse aid dosage.

Different brands of detergent dissolve in different times. Some detergent tablets do not have the best cleaning results during short washing programmes. Use long washing programmes when you use detergent tablets to fully remove the detergent.

Washing programmes

Washing programmes

Programme	Degree of soil	Type of load	Programme description	Energy Save option[1]
	Heavy soil	Crockery, cutlery, pots and pans	Prewash Main wash up to 70°C 2 intermediate rinses Final rinse Drying	Selectable, impact on washing programme.
AUTO [2]	Mixed normal and light soil	Crockery, cutlery, pots and pans	Prewash Main wash up to 45°C or 70°C 1 or 2 intermediate rinses Final rinse Drying	Selectable, impact on washing programme.
ECO [3]	Normal soil	Crockery and cutlery	Prewash Main wash up to 55°C 1 intermediate rinse Final rinse Drying	Selectable, impact on washing programme.

Programme	Degree of soil	Type of load	Programme description	Energy Save option1)
	Normal or light soil	Crockery and cutlery	Main wash up to 50°C 1 intermediate rinse Final rinse	Selectable, no impact on washing programme.

1) For programmes where the option has an impact, the energy saving is between 10% and 25%.
2) During the 'Auto' washing programme the level of soiling on the dishes is determined by how cloudy the water is. The programme duration, water and energy consumption levels can vary; this depends upon if the appliance is fully or partially loaded and if the dishes are lightly or heavily soiled. The temperature of the water is automatically adjusted between 45°C and 70°C.
3) Test programme for test institutes. Please refer to separate leaflet supplied, for test data.

Consumption values

Programme	Programme duration (in minutes) 1)	Energy consumption (in kWh)	Water consumption (in litres)
	-	1,0	9,0
AUTO	-	0,5-0,8	5,0-9,0
ECO	-	0,63	7,0
	-	0,45	6,0

1) The digital display shows the programme duration.

The pressure and temperature of the water, the variations of power supply and the quantity of dishes can change these values.

Setting and starting a washing programme

Set the washing programme with the door ajar. The washing programme only starts after you close the door. Until then it is possible to modify the settings.

Do these steps to set and start a washing programme:
1. Switch on the appliance.
2. Make sure that the appliance is in setting mode.
3. Press one of the programme buttons. Refer to the chapter 'Washing programmes'.
   – The programme indicator light comes on.
   – All other programme indicator lights go off.
   – The digital display shows in flashing the programme duration.
   – The phase indicator light for the washing programme starts to flash.
4. Close the door.
   – The washing programme starts automatically.
   – The phase indicator light for the washing programme is on.

When the washing programme operates, you cannot change the programme. Cancel the washing programme.

Warning! Only interrupt or cancel a washing programme if necessary.

Caution! Open the door carefully. Hot steam can come free.

Cancelling a washing programme

1. Press and hold function buttons B and C until all the programme lights come on.
2. Release function buttons B and C to cancel the washing programme.

At this time you can do these steps:
1. Switch off the appliance.
2. Set a new washing programme .

Fill the detergent dispenser with detergent before you set a new washing programme.

Interrupting a washing programme

Open the door.

- The programme stops.

Close the door.

- The programme continues from the point of interruption.

Setting and starting a washing programme with delay start

1. Press the on/off button.
2. Set a washing programme.
3. Press the delay start button until the display shows on flashing the necessary delay start of the washing programme.
   - The delay start indicator light comes on.
4. Close the door.
   - The number on the display comes on with fixed light.
   - The countdown of the delay start starts.
   - The countdown of the delay start decreases with steps of 1 hour.
   - When the countdown is completed, the washing programme starts automatically.

Do not open the door during the countdown to prevent interruption of the countdown. When you close the door again, the countdown continues from the point of interruption.

Cancelling a delay start:

1. Press and hold function buttons B and C until all the programme lights come on.
   - When you cancel a delay start, you also cancel the washing programme.
2. Set a new washing programme.

You can select the washing programme and delay start also with the door closed. When you press a programme button you have only 3 seconds to select a different washing programme or a delay start. After these 3 seconds, the selected programme starts automatically.

End of the washing programme

Switch off the appliance in these conditions:

- The appliance stops automatically.
- The display shows 0.
- The end of programme indicator light comes on.

1. Press the on/off button.
2. Open the door.
3. For better drying results, keep the door ajar for some minutes before you remove the dishes.

Let the dishes cool down before you remove them from the appliance. Hot dishes are easily damaged.

If the save energy function is set, dishes can be wet once the programme finished. We recommend to leave the appliance door ajar so that dishes can dry naturally.

Standby mode

If you do not switch off the appliance at the end of the washing programme, the appliance automatically goes into standby mode. The standby mode decreases energy consumption.
Three minutes after the end of the programme, all indicator lights go off and the digital display shows one horizontal bar.
Press one of the buttons (not the on/off button), to go back to end-of-programme mode.

Care and cleaning

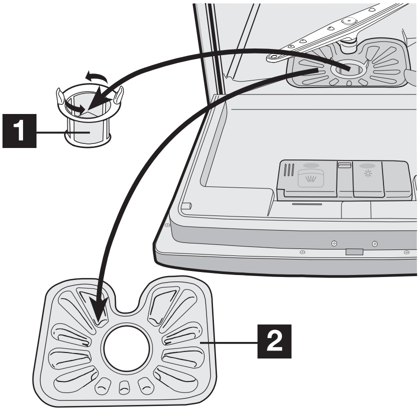
Warning! Switch the appliance off before you clean the filters.

Cleaning the filters

Caution! Do not use the appliance without filters. Make sure that the installation of the filters is correct. Incorrect installation will cause unsatisfactory washing results and damage to the appliance.

The dishwasher has 2 filters:

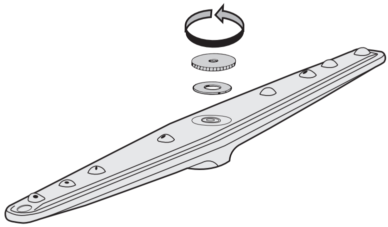
1. microfilter
2. flat filter



Do these steps to clean the filters:
1. Open the door.
2. Remove the basket.
3. Remove the filters in the bottom of the appliance.
4. Clean the filters below running water.
5. Put the filters back.
6. Turn the microfilter clockwise to lock it.
7. Close the door.

Cleaning the spray arm

Regularly examine the spray arm. Remove remaining food from the holes in the spray arm.



Do these steps to remove the spray arm:
1. Turn the nut anticlockwise.
2. Remove the spray arm.
3. Fully clean the holes.

External cleaning

Clean the external surfaces of the appliance and control panel with a damp soft cloth. Only use neutral detergents. Do not use abrasive products, scouring pads or solvents (acetone, trichloroethylene etc...).

Frost precautions

⚠ **Caution!** Do not install the appliance where the temperature is below 0 °C. The manufacturer is not responsible for damage because of frost.

If not possible, empty the appliance and close the door. Disconnect the water inlet hose and remove water from the water inlet hose.

Technical data

Dimensions	Width cm	54,5
	Height cm	44,7
	Depth cm	48-49
Electrical connection - Voltage - Overall power - Fuse	Information on the electrical connection is given on the rating plate on the back of appliance.	
Water supply pressure	Minimum	0,8 bar (0,08 MPa)
	Maximum	10 bar (1,0 MPa)
Capacity	Place settings	6

What to do if…

The appliance does not start or stops during operation.
If there is a fault, first try to find a solution to the problem yourself. If you cannot find a solution to the problem yourself, contact the Service Force Centre.

Fault code and malfunction	Possible cause and solution
• digital display shows i10 The dishwasher does not fill with water	• The water tap is blocked or furred with limescale. Clean the water tap. • The water tap is closed. Open the water tap. • The filter in the water inlet hose is blocked. Clean the filter. • The connection of the water inlet hose is not correct. The hose can be kinked or squashed. Make sure that the connection is correct.
• digital display shows i20 The dishwasher will not drain	• There is a blockage in the sink spigot. Clean the sink spigot. • The connection of the water drain hose is not correct. The hose can be kinked or squashed. Make sure that the connection is correct.
• the drain pump operates continuously • all indicators lights on the control panel go off The anti-flood device operates	• Close the water tap and contact your local Service Force Centre.
The programme does not start	• The appliance door is not closed. Close the door. • Mains plug is not connected in. Put in the mains. • The fuse has blown out in the household fuse box. Replace the fuse. • Delay start is set. Cancel the delay start to start the programme immediately.

After the check, switch on the appliance. The programme continues from the point of interruption. If the malfunction shows again, contact your Service Force Centre.
These data are necessary to help you quickly and correctly:
- Model (Mod.)
- Product number (PNC)
- Serial number (S.N.)

For these data, refer to the rating plate.
Write the necessary data here:
Model description : ....
Product number : ....
Serial number : ....

The cleaning results are not satisfactory	
The dishes are not clean	• The selected washing programme is not applicable for the type of load and soil. • The basket is loaded incorrectly so that water cannot reach all surfaces. • Spray arm does not turn freely because of incorrect arrangement of the load. • The filters are dirty or not correctly installed. • The quantity of detergent is too little or missing.
Limescales particles on the dishes	• The salt container is empty. • The water softener is adjusted on a wrong level. • The salt container cap is not closed correctly.
The dishes are wet and dull	• No rinse aid has been used. • The rinse aid dispenser is empty.
There are streaks, milky spots or a bluish coating on glasses and dishes	• Decrease the rinse aid dosage.

The cleaning results are not satisfactory	
Dry water drop signs on glasses and dishes	• Increase rinse aid dosage. • The detergent can be the cause.

Installation

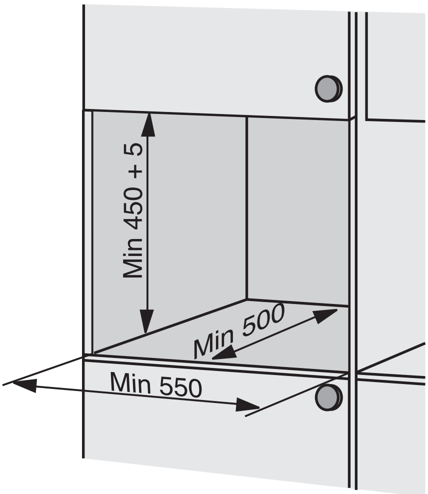
Warning! Make sure that mains plug is disconnected from the mains socket during installation.

Fitting the appliance

Put the appliance adjacent to a water tap and a drain.
When you put the appliance in place, make sure that the water hoses are not kinked or squashed.
Install the appliance on a kitchen sink, work-top or built-in..

Positioning

Install the dishwasher into the furniture of the kitchen.



Make sure that the dimensions of the recess agree with the given dimensions.
Make sure that there are openings in the furniture for the inlet hose, the water drain hose and the mains cable.

Adjusting the level of the appliance

Make sure that the appliance is level to close and seal the door correctly. If the level of the appliance is correct, the door does not catch on the sides of the cabinet. If the door does not close correctly, loosen or tighten the adjustable feet until the appliance is level.

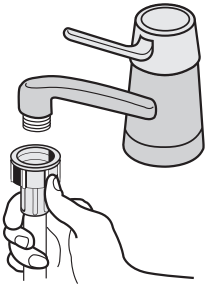
Water connection

Inlet hose

The appliance has safety features to prevent that the water in the appliance goes back into the drinking water system.
Connected the appliance to a hot (max. 60°) or cold water supply.

If the hot water comes from alternative sources of energy that are more environmentally friendly (e.g. solar or photovoltaic panels and aeolian), use a hot water supply to decrease energy consumption.
It is important that a water tap or stopcock is near the dishwasher with easy access.

Connect the inlet hose to a water tap with an external thread of 3/4”.



If the water inlet hose is too short, replace the water inlet hose with an applicable, longer high-pressure hose. Do not connect an extension hose.
To suit the installation, it is possible to turn the end of the hose that is connected to the dishwasher. Do these steps :

1. Loosen the retaining nut.
2. Turn the hose.
3. Tighten the retaining nut.

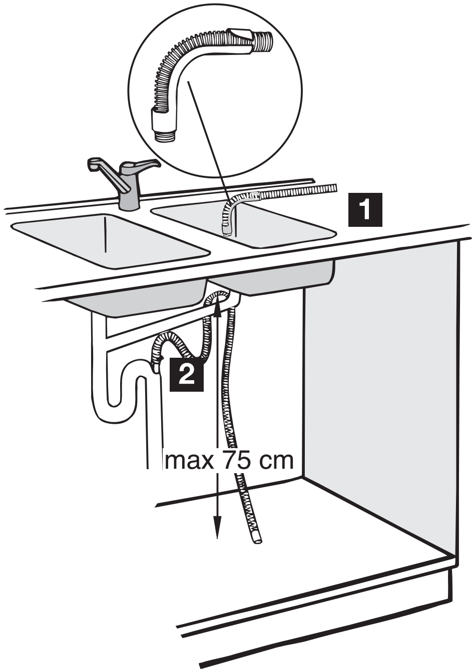
⚠ **Warning!** Make sure that the retaining nut and all other connections are tight before you move the dishwasher into position.

⚠ **Warning!** Always use a new water inlet hose. Do not use connection hoses from an old appliance.

Drain hose

The appliance has water safety system to prevent water damage. If there is a malfunction, the drain pump automatically starts to drain the remaining water out of the dishwasher.

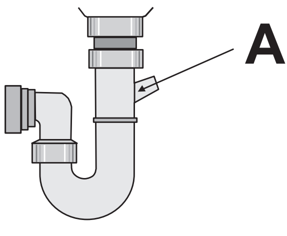
⚠ **Warning!** Only if the dishwasher is connected to the mains socket, the water safety system operates when the dishwasher is off.



2 procedures are possible to install the water drain hose :

1. Attach the plastic curve supplied at the end of the hose.
   Put the water drain hose in the sink.
2. Connect the water drain hose to the water drain system.
   The hose must be less than 75 cm above the bottom of the dishwasher to prevent incorrect operation of appliance.

If you connect the water drain hose to a trap spigot under the sink, remove the plastic membrane (A). If you do not remove the membrane, remaining food can cause a blockage in the drain hose spigot



Electrical connection

Warning! The manufacturer is not responsible if you do not follow these safety precautions.
Ground the appliance according to safety precautions.
Make sure that the rated voltage and type of power on the rating plate agree with the voltage and the power of the local power supply.
Always use a correctly installed shockproof socket.
Do not use multi-way plugs, connectors and extension cables. There is a risk of fire.
Do not replace the mains cable yourself. Contact the Service Force Centre.
Make sure that the mains plug is accessible after installation.
Do not pull the mains cable to disconnect the appliance. Always pull the mains plug.

Environment concerns

The symbol on the product or on its packaging indicates that this product may not be treated as household waste. Instead it should be taken to the appropriate collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local council, your household waste disposal service or the shop where you purchased the product.

The packaging materials are environmentally friendly and can be recycled. The plastic components are identified by markings, e.g. >PE<, >PS<, etc. Discard the packaging materials in the applicable container at the community waste disposal facilities.

Warning! To discard the appliance, follow the procedure:

- Pull the mains plug out of the socket.
- Cut off the mains cable and mains plug and discard them.
- Discard the door catch. This prevents the children to close themselves inside the appliance and endanger their lives.

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